B4 N-terminal sequencing. This fraction was sent to Commonwealth Biotechnologies, Inc. (Richmond, VA), cleaved with BrCN, HPLC purified, and fractions sequenced.

In the claims

Please cancel claims 21-23 without prejudice or disclaimer, and substitute the following amended versions of claims 1, 4, 6, 8, 9, 10, 12, 13, 15, and 17.

B5 1. (Amended) An isolated and purified polypeptide having histidine ammonia lyase activity, wherein the histidine ammonia lyase activity is not decreased in the presence of L-histidinol or a therapeutic salt thereof and the isolated polypeptide corresponds in sequence to histidine ammonia lyase of *Corynebacteriaceae* or to a fragment thereof which includes the active site, wherein the isolated polypeptide may comprise conservative substitutions relative to the sequence of histidine ammonia lyase of *Corynebacteriaceae*.

3. (Amended) A polypeptide according to claim 1, comprising a sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, and SEQ ID NO: 6.

B6 4. (Amended) A polypeptide according to claim 1, wherein the polypeptide has a monomeric molecular weight between about 30,000 and 70,000 daltons

5. (Amended) A polypeptide according to claim 4, wherein the polypeptide has a monomeric molecular weight of about 56,000 daltons.

6. (Amended) A modified polypeptide according to claim 1, that comprises polyethylene glycol.

B7 8. (Amended) A method of treatment according to claim 7, wherein the histidine ammonia lyase activity is not decreased in the presence of L-histidinol or a therapeutic salt thereof and the polypeptide corresponds in sequence to histidine ammonia lyase of *Corynebacteriaceae* or to a fragment thereof which includes the active site, wherein the polypeptide may comprise conservative substitutions relative to the sequence of histidine ammonia lyase of *Corynebacteriaceae*.

9. (Amended) A method according to claim 8, wherein the histidine ammonia lyase activity is not decreased in the presence of L-histidinol.

B7

10. (Amended) A method according to claim 8, further comprising administering a therapeutic amount of L-histidinol or a therapeutic salt thereof.

12. (Amended) A method for treating a patient suffering from a cancer, comprising administering to the patient suffering from said cancer a therapeutic amount of a polypeptide having histidine ammonia lyase activity, wherein said histidine ammonia lyase activity is not decreased in the presence of L-histidinol or a therapeutic salt thereof and the polypeptide corresponds in sequence to histidine ammonia lyase of *Corynebacteriaceae* or to a fragment thereof which includes the active site, wherein the polypeptide may comprise conservative substitutions relative to the sequence of histidine ammonia lyase of *Corynebacteriaceae*, and a therapeutic amount of L-histidinol or a therapeutic salt thereof.

B8

13. (Amended) A method for reducing toxicity to normal cells from chemotherapeutic agents or retroviral vectors, comprising

(i) administering to a patient a therapeutically effective amount of a polypeptide having histidine ammonia lyase activity, and

(ii) additionally administering to said patient a therapeutically effective amount of a chemotherapeutic agent or retroviral vector, whereby said polypeptide having histidine ammonia lyase activity selectively depletes circulating histidine and causes growth arrest in normal cells, without affecting the growth of tumor cells.

B9

15. (Amended) A method according to claim 13, wherein the polypeptide is a modified polypeptide that comprises polyethylene glycol.

B10

17. (Amended) A method according to claim 16, wherein the irradiating agent is UVB irradiation, and wherein the polypeptide comprises polyethylene glycol.

Please add the following claims:

24. (New) A polypeptide according to claim 1, wherein the polypeptide is histidine ammonia lyase purified from *Corynebacteriaceae* or a conservative variant thereof that has an activity of about 40 IU/mg protein.

25. (New) A polypeptide according to claim 1, wherein the polypeptide is histidine ammonia lyase purified from *Corynebacteriaceae*.

B11

26. (New) A polypeptide according to claim 1, having about 40 I.U./mg protein of histidine ammonia lyase activity.

27. (New) A polypeptide according to claim 1, that is recombinantly produced.

In the drawing

A proposed drawing correction for Figures 5 and 6 under separate cover is appended. In addition, newly numbered Figures 13-15 are appended to address an informality raised in PTO-948.